AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Claim 1 (currently amended): A storage library system, comprising:

a vertical stationary support member having a first axis; and

a cartridge transport assembly, comprising:

a cartridge retrieving mechanism configured to retrieve a removable media cartridge, said cartridge transport assembly being coupled to the vertical stationary support member, wherein the cartridge retrieving mechanism is positionable in four degrees of freedom.

Claim 2 (currently amended): The storage library system of claim 1, wherein:

a first degree of freedom of the cartridge retrieving mechanism comprises linear movement along the vertical stationary support member.

Claim 3 (original): The storage library system of claim 2, wherein:

a second degree of freedom of the cartridge retrieving mechanism comprises linear movement along a second axis approximately orthogonal to the first axis.

Claim 4 (original): The storage library system of claim 3, wherein:

a third degree of freedom of the cartridge retrieving mechanism comprises linear movement along a third axis approximately orthogonal to the first axis and the second axis.

Claim 5 (original): The storage library system of claim 4, wherein:

a fourth degree of freedom of the cartridge retrieving mechanism comprises rotational movement about a fourth axis.

Claim 6 (currently amended): The storage library system of claim 4, further comprising:

a fifth degree of freedom of the cartridge retrieving mechanism comprising radial extension of the cartridge retrieving mechanism, the fifth degree of freedom orthogonal to [[about]] the fourth axis.

Claim 7 (currently amended): The storage library system of claim 6, further comprising:

an enclosure having a first side wall, an opposing second side wall, and a back wall adjacent to the first and second side walls;

a cavity region between the first side wall, the second side wall, and the back wall, the vertical stationary support member and the cartridge transport assembly being positioned in the cavity region.

Claim 8 (original): The storage library system of claim 7, further comprising:

a plurality of storage bins disposed on the first and second side walls.

Claim 9 (original): The storage library system of claim 7, further comprising:

at least one tape drive disposed on the back wall.

Claim 10 (currently amended): A storage library system, comprising:

a vertical stationary support member having a first axis;

a cartridge transport assembly coupled to the vertical stationary support member, the cartridge transport assembly comprising:

a first assembly ~~carriage~~ coupled to the vertical stationary support member;

a first actuator coupled to the first assembly ~~carriage~~ and the vertical stationary support member configured to actuate linear movement of the first assembly ~~carriage~~ along the vertical stationary support member;

a second assembly ~~carriage~~ movably coupled to the first assembly ~~carriage~~ ;

a second actuator engaging the first and second assemblies ~~carriages~~ configured to actuate linear movement of the second assembly ~~carriage~~ along a second axis non-parallel to the first axis;

a third assembly ~~carriage~~ movably coupled to the second assembly ~~carriage~~ ;

a third actuator engaging the second and third assemblies ~~carriages~~ configured to actuate linear movement of the third assembly ~~carriage~~ along a third axis non-parallel to the first axis and the second axis; and

a cartridge retrieval mechanism coupled to the third assembly ~~carriage~~ .

Claim 11 (original): The system of claim 10, wherein the cartridge transport assembly further comprises:

a rotary actuator engaging the third carriage and the cartridge retrieval mechanism configured to actuate rotational movement of the cartridge retrieval mechanism.

Claim 12 (original): The system of claim 11, wherein the cartridge transport assembly further comprises:

an extension actuator coupled to the cartridge retrieval mechanism configured to extend the cartridge retrieval mechanism to retrieve a cartridge from a storage bin in the storage library system.

Claim 13 (original): The system of claim 12, wherein the cartridge transport assembly further comprises:

a robotics controller for controlling the first, second, third, rotary, and extension actuators, and the cartridge retrieval mechanism.

Claim 14 (original): The system of claim 13, further comprising:

a library controller; and

an umbilical connection coupling the library controller with the cartridge transport assembly.

Claim 15 (original): The system of claim 10, further comprising:

a library controller; and

an umbilical cable coupling the library controller with the cartridge transport assembly, said umbilical cable providing power to the cartridge transport assembly;

wherein the cartridge transport assembly further comprises a power supply coupled to the umbilical cable for receiving power at a first voltage, the power supply configured to convert the power at the first voltage to a plurality of different voltages.

Claim 16 (original): The system of claim 10, further comprising:

an enclosure having a first side wall, an opposing second side wall, and a back wall adjacent to the first and second side walls;

a cavity region between the first side wall, the second side wall, and the back wall, the vertical support member and the cartridge transport assembly being positioned in the cavity region; and

a plurality of storage bins disposed on the first and second side walls.

Claim 17 (original): The system of claim 16, further comprising:

at least one tape drive positioned on the back wall of the enclosure.

Claim 18 (currently amended): The system of claim 10, wherein the vertical support member is positioned approximately vertically.

Claims 19-21 (cancelled)

Claim 22 (new): The storage library system of claim 1, wherein the cartridge transport assembly comprises a horizontally disposed tray assembly for supporting the cartridge retrieving mechanism.

Claim 23 (new): The system of claim 10, wherein the first assembly comprises a horizontally disposed tray assembly for supporting the second assembly.